Summary of DoD QSM V4.1 Changes

As a result of issues identified during the training of Accreditation Bodies (AB) and the open forum discussions during the DoD Environmental Monitoring and Data Quality Workshop, the EDQW decided to make several changes to the DoD QSM V4 prior to AB's performing assessments for compliance with the requirements of the DoD Environmental Laboratory Accreditation Program.

A summary of the changes follows:

1. Several acronyms were added to List of Acronyms and the Appendix F acronyms.

2. Changes to Gray Box 31:

   Terminology pertaining to metrology was changed to be consistent with National Metrology Institute (NMI) usage requiring traceability to SI.

   The acceptance criterion for freezer temperature was changed to ≤ -10° C.

   Criteria for Volumetric labware and Mechanical volumetric pipettes requiring verification upon receipt was changed to "Before first use". Criteria for Non-volumetric labware were changed to "By lot before first use".

   The requirement for yearly servicing of the balance by a certified technician was deleted.

   The Thermometer calibration check allowance for a single temperature checks of electronic thermometers used only for a single temperature measurement was restored.

3. Gray Box D-3:

   The third bullet was changed by removing the term "new analyst."

4. Appendix F:

   Descriptions of the LOD and LOQ have been removed from Table F-1. All remaining tables in Appendix F refer the reader to Gray Box D-13 for requirements pertaining to the LOD and to Gray Box D-14 for requirements pertaining to the LOQ.

5. Table F-4

   Corrective action and flagging criteria for the CCV were changed. Corrective action for the CCV now reads, "DoD project level approval must be obtained for each of the failed analytes or corrective action must be taken. Correct problem, then rerun calibration verification. If that fails, then repeat ICAL. Reanalyze all samples since acceptable CCV."

   The flagging criterion now reads, "If reanalysis cannot be performed, data must be qualified and explained in the case narrative. Apply Q-flag to all results for the specific analyte(s) in all samples since acceptable CCV."

6. Tables F-5 and F-6

The flagging criterion for the Estimated Maximum Possible Concentration (EMPC) has been changed to "Flag as appropriate."

7. Table F-6

   The Corrective Action for the calibration verification has been changed to read: "Correct problem, repeat calibration verification standard. If that fails, repeat ICAL and reanalyze all samples analyzed since the last successful CCV. End-of-run CCV: If the RF for unlabeled standards ≤ 25% RPD and the RF for labeled standards ≤ 35% RPD (relative to the RF established in the ICAL), the mean RF from the two daily CCVs must be used for quantitation of impacted samples instead of the ICAL mean RF value. If the starting and ending CCV RFs differ by more than 25%RPD for unlabeled compounds or 35%RPD for labeled compounds, the sample may be quantitated against a new initial calibration if it is analyzed within two hours. Otherwise reanalyze samples with positive detections if necessary."

8. Table F-7

   The Corrective Action for the Matrix Spike has been changed. Requirements pertaining to ICP/GFAA and CVAA have been deleted.